



Home Energy Efficiency for Real Estate Professionals



DATE, YEAR

Notes to User / Presenter

- ▶ This document is intended to help you communicate the value of energy information to real estate professionals at time of sale
- ▶ It is meant to be used by organizations that are partnered with the DOE's Home Energy Score program
- ▶ All items in red should be customized for your organization and region, then changed to blue
- ▶ DELETE THIS SLIDE BEFORE PRESENTING
- ▶ Please don't hesitate to contact us if you have any questions. Thank you!
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This Presentation Covers:

- ▶ The importance of energy efficiency to homebuyers
- ▶ Work being done to help you meet clients' desires for home energy information
- ▶ How to keep up-to-date with home energy labels and ratings for your clients
- ▶ Links to resources for learning more



Why Does *Your Organization* Care About Residential Energy Efficiency?

- ▶ *Tell the audience: what stake does your organization have in this?*
- ▶ Improving residential energy efficiency helps to: *(exclude or change the list below as necessary)*
 - ▶ Improve in-home comfort for home owners, buyers, renters
 - ▶ Save families money on energy bills
 - ▶ Reduce wasted energy resources & carbon emissions
 - ▶ Foster growth of energy efficiency jobs in local economy
 - ▶ Stabilize monthly home costs as energy prices change
 - ▶ Mitigate health impacts of homes, including mold, allergens, and pests

Why Do Homeowners & Buyers Care About Energy Efficiency?

Helps Reduce Costs:

- ▶ [U.S. Census](#): On average, energy costs are higher than either property tax or insurance for U.S. homes at \$2,506 per year



Smart Investment:

- ▶ [Remodeling Report](#): Attic insulation achieves highest return on investment of all home improvement projects studied at 116.9%
 - ▶ Attic Insulation averaged the cheapest upgrade at \$1,268



Improves Quality of Life:

- ▶ [NARI Report](#): Energy improvements are good investments that bring financial relief and “joy”
 - ▶ Insulation Upgrade: 61% say greater desire to be home, 95% same or increased sense of enjoyment, and 66% major sense of accomplishment



A smiling woman with dark hair, wearing a bright blue V-neck shirt, stands in the foreground. Behind her is a white house with a porch featuring a white railing. A hanging basket of orange flowers is visible on the porch. The background is filled with green foliage and trees.

Buyers need access to energy efficiency information that is credible and easy to understand.

Sellers need tools that can accurately appraise the value of improved energy performance.

Therefore, we need to bridge the gap between the energy information clients want and the real estate professionals guiding them.

Studies Nationwide Show Energy Efficient Homes Sell for More, Faster

Certified homes sell for 9.6% more⁶

Certified homes sell for 4.2% more & 18 days faster⁶

Certified homes sell for 2.1 to 5.3% more⁹

PACE homes delivered \$199 to \$8,882 in savings above cost of improvements⁷

Homes that disclose energy costs sold 20 days faster⁵

Homes that use “green” fields consistently perform better on market indicators⁸

ENERGY STAR homes sold at \$5,566 premium at \$2.99 per ft² more, & 89 days faster¹⁰

New certified homes sold for 12.9% more, \$13.82 per ft² more, & 42 days faster¹

Homes designated relatively energy efficient sold for an average \$3,416 premium⁴

Certified homes sold for a higher percentage of their asking price & 31 days faster²

Houses with one or more green element sell for 5.9% more²

Sources: ¹Argeris, 2010; ²Cadena & Thomson, 2015; ³Carson Matthews, 2009; ⁴Corgel, Goebel, & Wade, 1982; ⁵Elevate Energy, 2015; ⁶Griffin, 2009; ⁷Goodman & Zhu, 2016; ⁸Institute for Market Transformation, 2015; ⁹Kahn & Kok, 2013; ¹⁰Pfleger et al., 2011.

The Research Says: Homebuyers Value Energy Efficiency

Studies Show a Sales Premium of:



2% to 12.9% for designated energy efficient homes ^{1, 2, 3, 7, 12}



\$2.99 to \$13.82 per square foot for every dollar saved on annual electricity bills from efficiency investments ^{1, 5, 10, 15}



\$3,416 to \$8,882 for designated energy efficient homes ^{4, 8, 9, 12, 13, 14, 15}



Designated energy efficient

VS.



Comparable home

Sources: ¹Argeris, 2010; ²Cadena & Thomson, 2015; ³Carson Matthews, 2009; ⁴Corgel, Goebel, & Wade, 1982; ⁵Dinan & Miranowski, 1989; ⁶Elevate Energy, 2015; ⁷Griffin, 2009; ⁸Goodman & Zhu, 2016; ⁹Halvorsen & Pollakowski 1981; ¹⁰Horowitz & Haeri, 1990; ¹¹Institute for Market Transformation, 2015; ¹²Kahn & Kok, 2013; ¹³Laquatra, 1986; ¹⁴Longstreth, 1986; ¹⁵Pfleger et al, 2011.

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Providing Energy Information Can Be A Good Step

Elevate Energy, 2015: Chicago Homes that Disclose Energy Costs Spend Less Time on Real Estate Market

- ▶ Homes that provide energy costs: median 43 days on market; 66% closing rate
- ▶ Homes that did not provide energy costs: median 63 days on market; 53% closing rate

Hill et al., 2016: In EU, Canada, Australia, homebuyers appreciate having more information rather than less; poor ratings don't discourage home purchases, but do inform energy upgrades

- ▶ This helps them make the most informed decision possible, even if they will need to fix an energy feature of the home
- ▶ Analysis of European disclosure programs shows homebuyers do not use ratings to discourage home purchase, rather simply to inform sale (p. 11)
- ▶ 2013 EU Study: 2% - 6% appreciation in home value attributed to one-letter rating improvement

Voluntary disclosure may be a good option for your clients selling their homes

Source: Hill et al., 2016. Predicting Home Energy Rating and Disclosure Program Impacts for North American Jurisdictions. ACEEE Summer Study Paper.

If it Doesn't Impact Home Purchases, Why Do We Like Energy Information?

Knowledge is power!

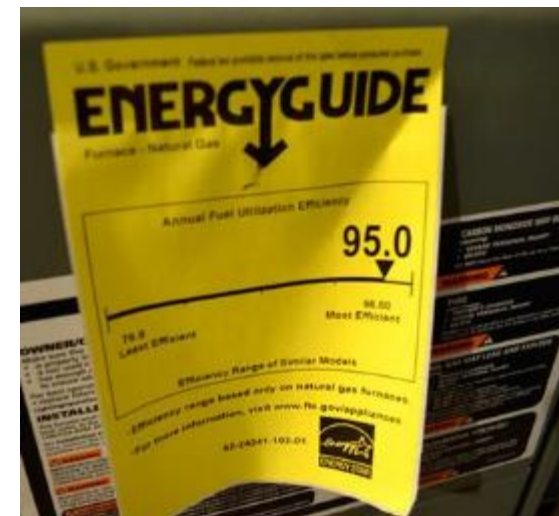
- ▶ Energy information with recommendations influences new home owners into making energy renovations

Assessments of Home Energy Ratings on Conversion Rates

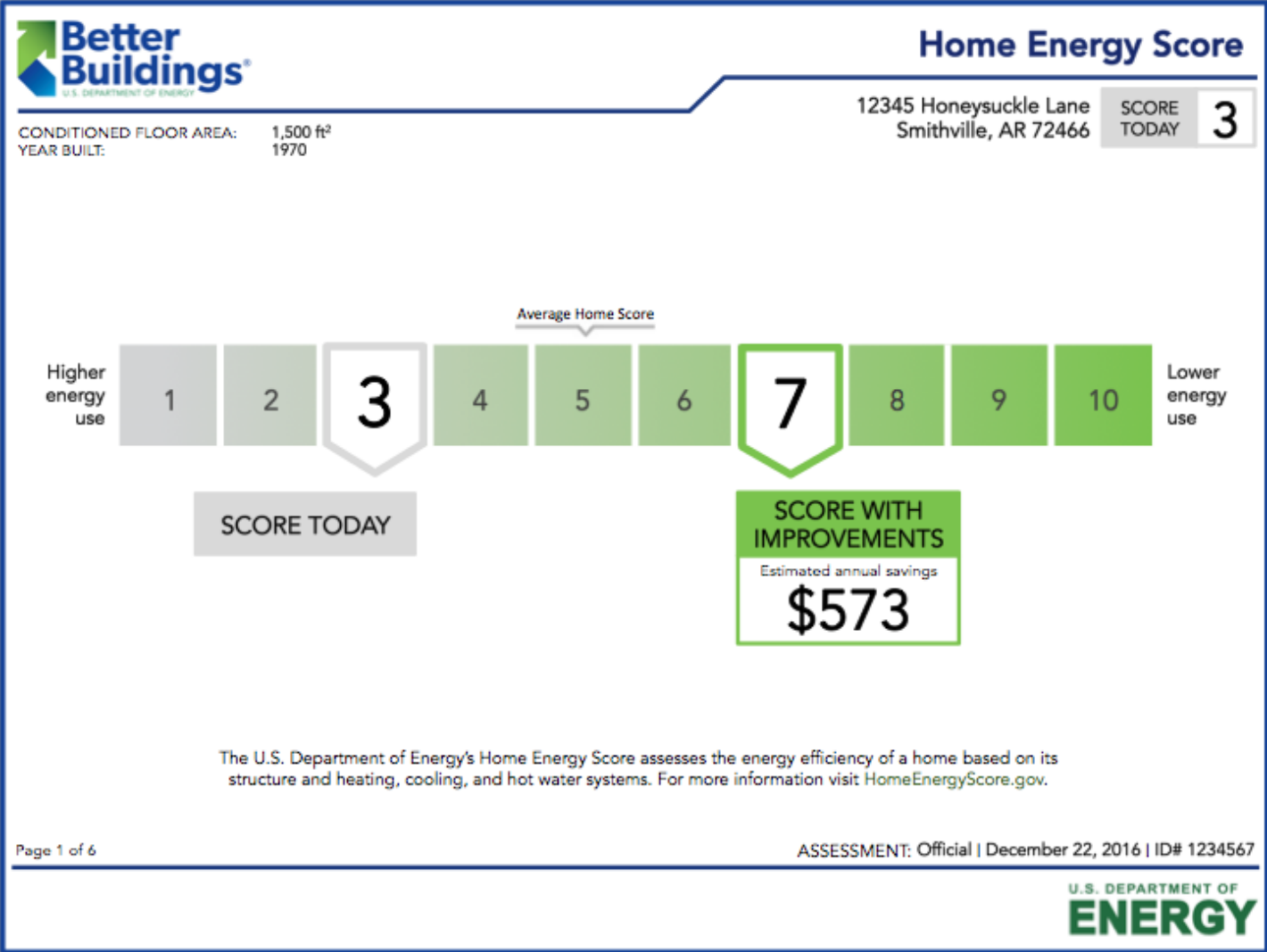
| Jurisdiction | Portion of Buyers Influenced by Rating / Disclosure Report Recommendations When Making Renovations |
|-----------------|--|
| Austin, TX | 12% in first year of program (ACEEE, 2011) |
| Australia (ACT) | 15% (Energy Consult, 2006) |
| France | 37% (ADEME, 2012) |
| Portugal | 17.5% (ADENE, 2015) |
| The Netherlands | 22% (Murphy, 2014) |

How to Provide Energy Information: DOE's Home Energy Score

- ▶ A “miles-per-gallon” rating for homes
- ▶ Affordable, reliable, & easy way to understand a home's energy performance
- ▶ Third-party verified
- ▶ Any single-family or town-home can get a Home Energy Score
- ▶ Helpful for any of your clients
 - ▶ Shows seller cost-effective investments to improve their home's score before they sell
 - ▶ Lets seller showcase energy improvements they have made to their home at time of sale
 - ▶ Tells potential homebuyer information about a home's energy features



Home Energy Score: A Tool for All Homes



Home Energy Score: What It Means

The Score is more useful than looking at prior utility bills

- ▶ Assumes average weather for that location
- ▶ Controls for impacts due to occupant behavior by assuming “average” behavior for all homes

Score with Improvements:

- ▶ Reflects how the home will score if cost-effective efficiency improvements are made

Score of 1: High energy costs

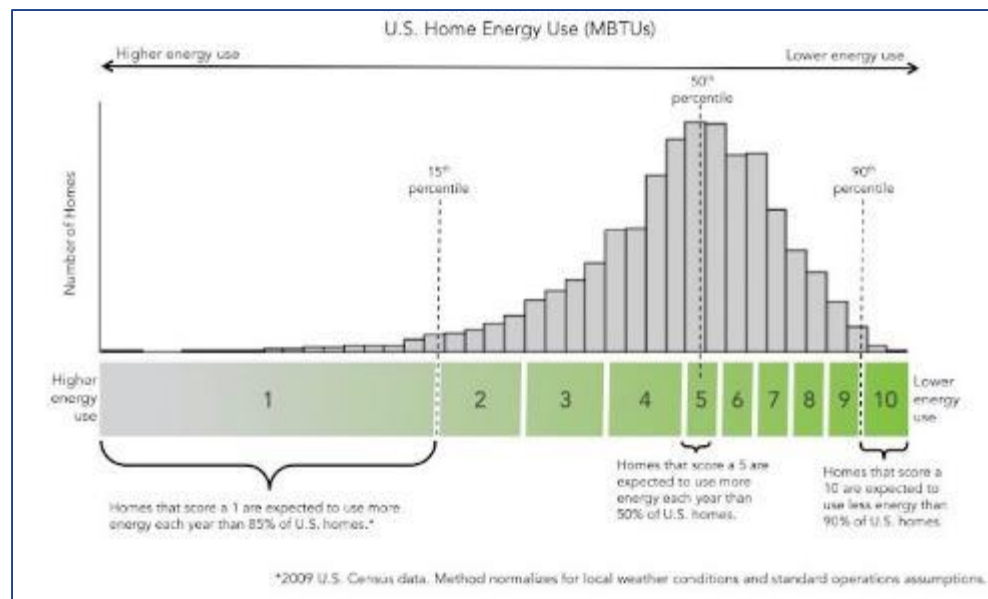
- ▶ These homes are expected to use more energy each year than 85% of U.S. homes

Score of 5: Average energy costs

- ▶ Approximately 50 percent of homes in the U.S. use less energy

Score of 10: Low energy costs

- ▶ Homes expected to use less energy than 90% of U.S. homes; easier to keep living space comfortable



Who Can Provide the Home Energy Score to Clients?

- ▶ Assessors qualified by U.S. DOE
- ▶ *Provide lists / contact information / some way for real estate professionals to appropriately direct their clients to qualified Assessors*
- ▶ *Information on local Home Energy Score Partners that are –*
 - ▶ *Utilities*
 - ▶ *State Programs*
 - ▶ *Home Inspectors*
 - ▶ *& More!*
- ▶ See our list of active Partners at www.HomeEnergyScore.gov

Other “Green Home” Designations, Too!



Example: Home Performance with ENERGY STAR Certificate of Completion

- ▶ Proof home underwent energy efficiency upgrades to improve performance
 - ▶ A systematic approach to improving energy efficiency and comfort in homes
 - ▶ Reduces greenhouse gas emissions that contribute to climate change
- ▶ Improvements must be completed by participating contractors
- ▶ Third party verified by an organization separate from the contractor


Home Performance with ENERGY STAR[®]
Certificate of Energy Improvements

IC: Insert Local Date, and sign each line of this certificate to be complete. Do not date this. It is void if not signed in the area of the space provided for the signature.

IC: Insert Local Date, and sign each line of this certificate to be complete. Do not date this. It is void if not signed in the area of the space provided for the signature.

| | |
|--|--|
| Home Address: <input type="text"/> | Home Performance Improvements: <input type="text"/> |
| Work Performed By: <input type="text"/> | |
| Work Verified By: <input type="text"/> | |
| Work Completed On: <input type="text"/> | |
| Signature: <input type="text"/> | Additional Information: <input type="text"/> |

ENERGY STAR is the symbol for energy efficiency. Home Performance with ENERGY STAR is a systematic approach to improving energy efficiency and comfort in homes, while reducing the greenhouse gas emissions that contribute to climate change. For more information, visit www.energystar.gov.

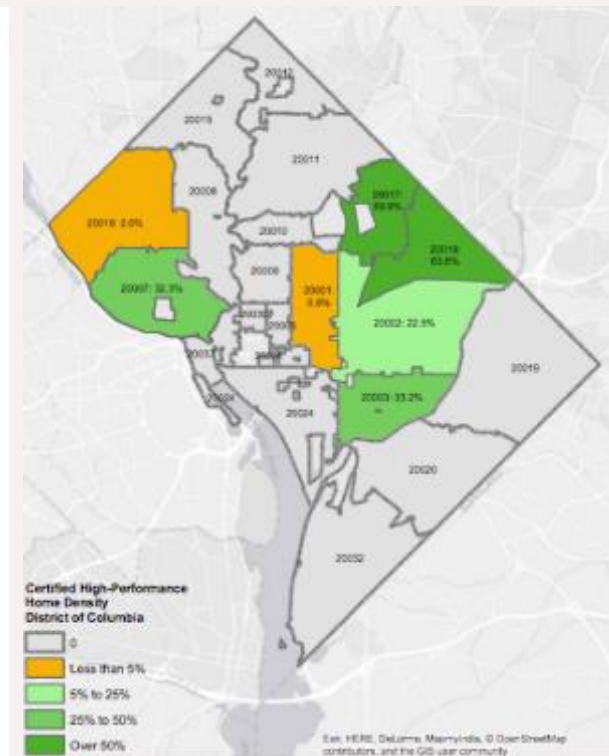
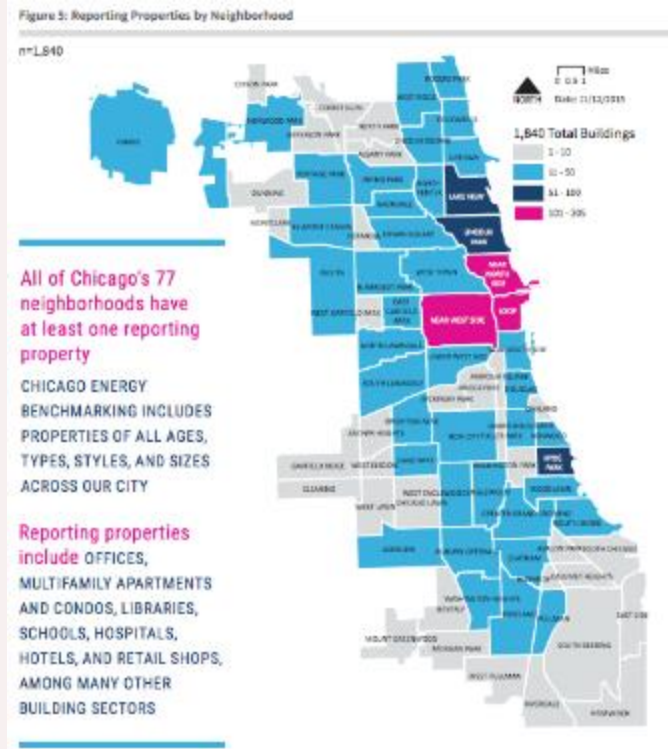


Map of Third-Party Certified Homes in Service Region

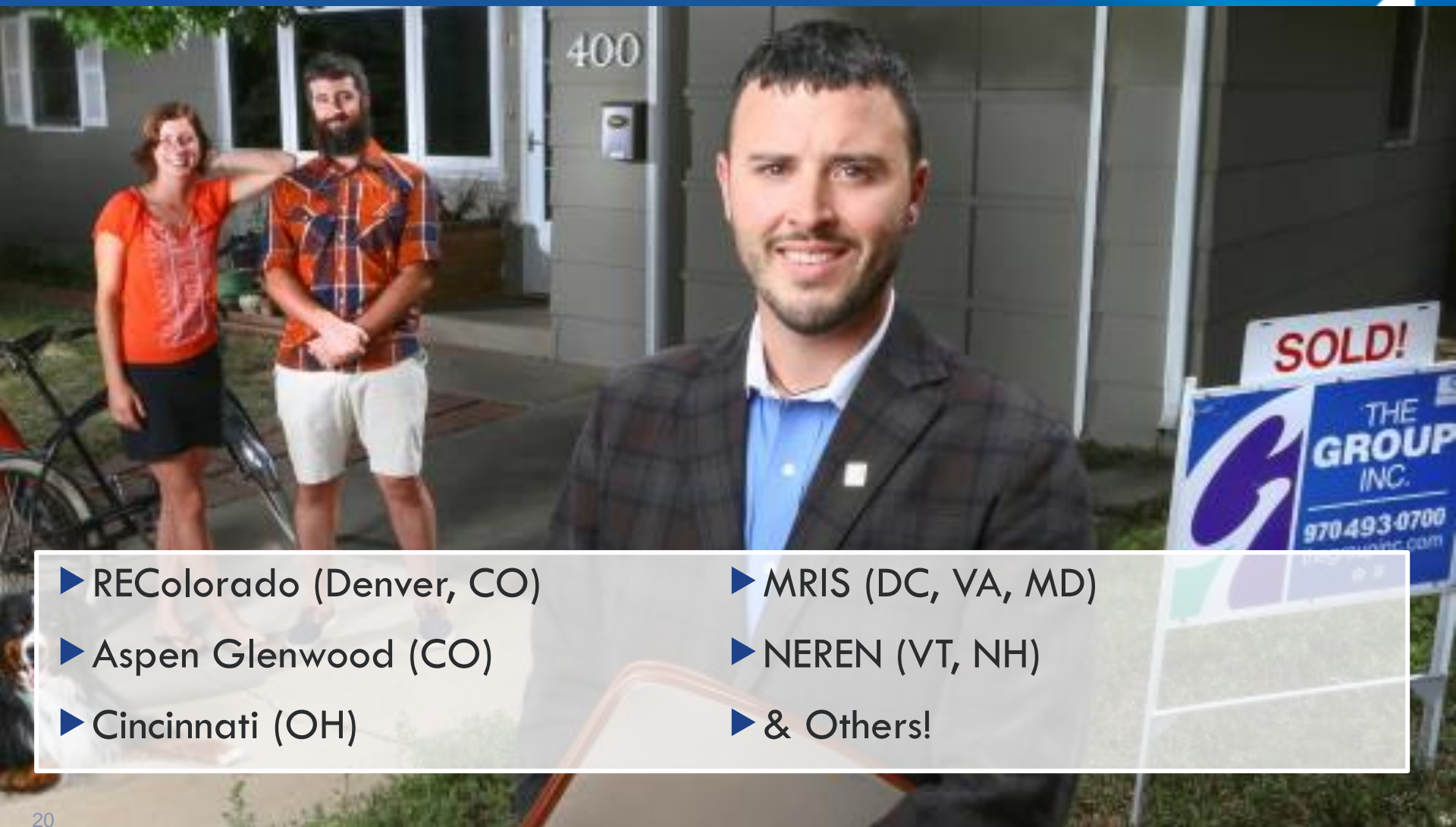
▶ 3rd-party certification reduces risk of real estate liability

Example Maps:

- ▶ Show significant & growing uptake in the area
- ▶ Provide a map with homes as data points or frequency of homes in the region
- ▶ Show that data is reliable and standardized



Green Fields with Home Energy Score Added to MLSs



- ▶ REColorado (Denver, CO)
- ▶ Aspen Glenwood (CO)
- ▶ Cincinnati (OH)

- ▶ MRIS (DC, VA, MD)
- ▶ NEREN (VT, NH)
- ▶ & Others!

Real Estate Professional Education

Agents need resources to learn how to enter data fields correctly

- ▶ “0” HERS Rating = Perfect Score!
- ▶ “0” Home Energy Score = Nonsensical / Terrible Score!
- ▶ ENERGY STAR Appliances \neq Home ENERGY STAR Certification

Use resources provided on DOE’s Home Energy Information Accelerator website



\neq




No Green Fields in the MLS?

Add Home Energy Score or other green label in the comments or “remarks” section

- ▶ Simply upload the verifying document from the homeowner as an attachment
- ▶ No need to wait for green fields to be available

Advocate for green field adoption on your MLS

- ▶ Ask the MLS to achieve RESO’s Silver Certification



Detached Single MLS #: **0411102**
LDR: **05/10/2004** CTGF: **A/I**
LD: **05/10/2004** MRKT TIME: **109**
OMD: LISTING MRKT TI
CONT DT: **05/15/2004** SELLING OFC:
CLSD DT: SELLING AGT:
ADDRESS: **20W456 WESTMINSTER DRIVE**
CITY: **DOWNERS GROVE**
DIR: **WOODWARD SOUTH OF 87TH STR TO W**
BLT: **1987** B78: **N**
OWN: **Fee Simple**
CRP: **UNINCORPORAT**
MODEL: **GRANT** DIM: **72 X 125**
RMS: **6** BR: **3** BTH: **2** MBB: **N**
CARS: **2** WF: **N** Tax: **\$2,687**
SAS: **N** PIN: **1006305019**

ASM: FREQ: **Not Applicable** WI: HS: **LEMONT** DIST#: SOUTH: **10** EAST: **0**

| ROOM NAME | SIZE | LEVEL | FLOORING | WIN TRMT | ROOM NAME | SIZE |
|-----------------|--------------|-------------------|-----------------|----------|--------------|-------------|
| Living Room: | 16X13 | Main Level | Hardwood | N | 4th Bedroom: | |
| Dining Room: | | | | | UTL: | 13X9 |
| Kitchen: | 18X11 | Main Level | Vinyl | Y | | |
| Family Room: | 20X14 | Lower | Hardwood | Y | | |
| Master Bedroom: | 16X12 | 2nd Level | Carpet | Y | | |
| 2nd Bedroom: | 13X10 | 2nd Level | Carpet | Y | | |
| 3rd Bedroom: | 11X9 | 2nd Level | Carpet | Y | | |

NC: **N** OD: KIT: **Eating Area-Ta**
AGE: **11-25 Years** HEA: **Gas, Forced Air**
AIR: **Central Air** IMPW: **Lake Michigan**
AMN: **Park/Playground** IMPS: **Sewer-Public**
APP: **Oven/Range, Microwave, Dishwasher, Washer, Dryer, Disposal** IMPO: **Curbs/Gutters,**
ATC: **Unfurnished** INF: LDS: **Landscaped Pri**
BAS: **Crawl, None** Lot Size: **Less Than .2**
BAT: **Shared Master Bath** MAI: **None**
IN: NCO: POS: **Immediate**
DRV: **Concrete** ROF: **Asphalt/Glass**
EBC: **Circuit Breakers** STY: **Bi-Level, Tri-Le**
EQP: **Humidifier, Ceiling Fan, Sump Pump, Sprinkler-Lawn** TPE: **Split Level**
EXT: **Brick (BR)** TRM: TRM: TRM:
FEA: **Patio, Storage Shed**
FND: **Concrete**
FPL: **Location-Family Room, Gas Logs**
GAR: **2.5 Car Garage, Garage Door Opener(s) (Auto)**
PWR: **None, Not Applicable**

Remarks: **IMMACULATE BRICK HOME, BEAUTIFULLY UP-DATED. EAT-IN-KITCHEN, FIREPLAC**
LANDSCAPED, S PRINKLER SYSTEM, LRG. PATIO AND HOT TUB, GREAT NEIGHBORHOOD 1 BLO
55 AND I-355 2003 TAXES ONLY \$2700. PLS. SEE SHOWING INSTRUCTIONS FOR CO-ORDIN

INTERNET LISTING: **All** REMARKS INTERNET: **Y**
A: **Y** FD: **Y**
HEM: **N** LIST: **Exclusive Agency**
CC: **2.5% - \$200** SCI: **Limited Service/Entry** EMAIL
 Only
SHO: **CALL 630-854-0883 OWNER PREFERS TO SHOW & NEG.**
OWNER: **AMY MUSCARNERO** AON: **N** PHON
BROKER: **AMERICAN CAPITAL REALTY INC.** ID#: **15801** PHON
AGENT: **PARRY SINGH** ID#: **139347** PHON
CO-LIST: AAN: PHON

Financing Options for Energy Efficiency Improvements



Finance up to 15% of “as completed” home value for energy improvements

- ▶ \$500 incentive to lender on each loan
- ▶ Pay off existing energy improvement debt (including PACE)

Requires a Home Energy Score, HERS report, or comparable locally-supported report

- ▶ Finance up to \$3,500 in weatherization or water-efficient improvements with no energy report

Additional Loan Opportunities

FHA's "stretch" policy

- ▶ Allows borrowers to qualify for a 2% stretch on debt-to-income ratios for homes that score a 6 or higher, or for improving less efficient homes to that threshold
- ▶ Aligned with Fannie Mae's HomeStyle Energy policy

Property Assessed Clean Energy (PACE)

- ▶ \$2.2 billion financed in California for energy efficiency, renewable energy, and water efficiency
- ▶ Other states looking to adopt
- ▶ Home Energy Score can be used to identify cost-effective measures, provide an objective estimate of savings, and document value after improvements are completed

State & Local Loan and Financing Options

- ▶ *Include local options as applicable*

What Can You Do?

Ask sellers if their home has any third-party certifications, and include them on the MLS

- ▶ Clients with efficient homes can better market its value
- ▶ Homes certified as “green” sell for more, and faster!

Encourage buyers to value energy efficiency in their home purchasing decisions

- ▶ An energy efficient home is likely to have lower and more stable energy bills, and more comfortable living spaces
- ▶ Ensure every client gets a beautiful, comfortable, and functional home

Encourage all clients to get a Home Energy Score

- ▶ Improving energy efficiency of homes may qualify for financing & incentives
- ▶ If desired, list the Home Energy Score on the MLS. Fix it before you list it!
- ▶ Team up with home inspectors that offer the Home Energy Score

Encourage your local MLS to include “green fields”

- ▶ This will help standardize listing inputs and engage more real estate professionals
- ▶ Advocate for the MLS to achieve RESO’s Silver Certification, which includes green fields

Learn more! Earn Continuing Education Units (CEUs)

This presentation is just the start! Courses are available online and in person, some of which offer Continuing Ed. Units

- ▶ CEUs are not offered with this presentation

InterNACHI:

- ▶ [Home Energy Score for Real Estate Professionals](#)

Earth Advantage:

- ▶ [Demystifying the Green Home](#)
- ▶ [Making Savvy Home Energy Upgrades](#)
- ▶ [Accredited Green Appraiser](#)

National Association of Realtors

- ▶ [NAR Green Day 1&2 Bundle](#)

Thank You!



YOUR NAME

YOUR EMAIL

YOUR PHONE

HomeEnergyScore@ee.doe.gov

Assessor@sra.com

www.HomeEnergyScore.gov

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Resources Informing This Presentation

- ▶ Cadena, Anjelita, & Thomson, Thomas A. (2015). [An Empirical Assessment of the Value of Green in Residential Real Estate.](#)
- ▶ [Capturing Energy Efficiency in Residential Real Estate Transactions: Steps that Energy Efficiency Programs Can Take](#)
- ▶ Crawford, Jeremy. (2016). [Home Energy Efficiency Information: Coming to Your MLS by 2018.](#)
- ▶ [Fannie Mae HomeStyle Energy Mortgage Loan Real Estate Fact Sheet](#)
- ▶ Goodman, Laurie S., & Zhu, Jun. (2016). [PACE Loans: Does Sale Value Reflect Improvements?](#)
- ▶ Hill, Alex J., et al. (2016). Predicting Home Energy Rating and Disclosure Program Impacts for North American Jurisdictions. ACEEE Summer Study on Energy Efficiency in Buildings.
- ▶ [Home Energy Score for Real Estate Fact Sheet](#)
- ▶ Institute for Market Transformation (IMT). (2015). [Greening the MLS: Bringing High-Performance Homes to Light in the District of Columbia.](#)
- ▶ Kahn, Matthew E., Kok, Nils. (2013). The capitalization of green labels in the California housing market. Regional Science and Urban Economics.
- ▶ [National Association of REALTORS® 2015 Remodeling Impact Report](#)
- ▶ Pfleger, W., Perry C., Hurst, N., Tiller, J. (2011). [Market Impacts of ENERGY STAR® Qualification for New Homes.](#)
- ▶ U.S. Green Building Council [USGBC]. (2014). [LEED in Motion: Residential.](#)
- ▶ [Unlocking the Value of an Energy Efficient Home: A Blueprint to Make Energy Efficiency Improvements Visible in the Real Estate Market](#)
- ▶ White House, 2016. [FACT SHEET: Obama Administration Announces Clean Energy Savings for All Americans Initiative.](#)